

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-022545**Date Inspected:** 09-Nov-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island **Location:** Shanghai, China**CWI Name:** Mr. SHI LIE**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segment**Summary of Items Observed:**

On this date CALTRANS OSM Quality Assurance (QA) Inspector Santhosh Ramakrishna Pillai was present during the times noted above for observations relative to fabrication work of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China.

This QA inspector randomly observed the following work:

1. INPROCESS:

Orthotropic Box Girder (OBG) at Trial Assembly Area:

ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) of Repair weld for the deck plate to deck plate transverse splice weld joint located on 11BE+11CE at cross beam side. The weld is designated as OBE11-007. The welder is identified as 040312. ZPMC QC Mr. SHI LIE was onsite monitoring the welding variables. The inprocess SMAW appears to be progressing in compliance with WPS-345-SMAW-1G (1F)-FCM-Repair-1. The weld repair report number is named as WR-16658.

ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) of Repair weld for the deck plate to deck plate transverse splice weld joint located on 11BE+11CE at counter weight side. The weld is designated as OBE11-009. The welder is identified as 053871. ZPMC QC Mr. SHI LIE was onsite monitoring the welding

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

variables. The inprocess SMAW appears to be progressing in compliance with WPS-345-SMAW-1G (1F)-FCM-Repair-1. The weld repair report number is named as WR-16658.

ZPMC welding personnel performing Flux Core Arc Welding (FCAW) of Complete Joint Penetration (CJP) welds joining the bottom plate to bottom plate transverse splice weld joint located on 11DW+11EW. The weld is designated as OBE11C-008. The welder is identified as 040609. ZPMC QC Mr. ZHOU PENG was onsite monitoring the welding variables. The inprocess FCAW appears to be progressing in compliance with WPS-B-T-2231-B-U2-F.

ZPMC welding personnel performing Flux Core Arc Welding (FCAW) of Complete Joint Penetration (CJP) welds joining the deck plate to deck plate transverse splice weld joint located on 11DE+11EE at cross beam side. The weld is designated as OBE11A-007. The welder is identified as 040367. ZPMC QC Mr. SHI LIE was onsite monitoring the welding variables. The inprocess FCAW appears to be progressing in compliance with WPS-B-T-2231-B-U2-F.

ZPMC welding personnel performing Flux Core Arc Welding (FCAW) of Complete Joint Penetration (CJP) welds joining the edge plate to side plate hold back weld joint located on east side of 11DW at cross beam side. The weld is designated as SEG071A-049. The welder is identified as 053486. ZPMC QC Mr. ZHOU PENG was onsite monitoring the welding variables. The inprocess FCAW appears to be progressing in compliance with WPS-B-T-2231-TC-U4b-F.

2. NDT:

Ultrasonic Testing (UT):

UT carried out as per the ZPMC submitted Notification No 07281.

This QA Inspector performed Ultrasonic Testing (UT) on approximately 10 % of CJP welds that has been previously tested and accepted by ZPMC ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3. This QA inspector generated a (UT) (TL-6027) report for this date. The QA Inspector generated a TL-6027 UT report on this date. Weld identification numbers were DP680-001-019, EP120-001-013, SP664-001-032, 035, SP168-001-046, 050, 052, 054, BP152-001-024, 026, 028, 030, SP742-002-048, SP504-002-054, 055, 056, SP722-002-047, 048, EP138-002-029, DP693-001-021.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Inspected By: Pillai,Santosh

Quality Assurance Inspector

Reviewed By: Miller,Mark

QA Reviewer